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#### **ABSTRACT**

This paper reports on several generic evaluation methods used by the evaluation office of the Curriculum Research and Development Group of the University of Hawaii (EO-CRDG). Scrivens's (generic) checklist approach was taken one step further by developing generic data collection instruments to be used with any evaluation method: (1) a formative evaluation feedback questionnaire; (2) an observation coding sheet; and (3) a teacher instructional behavior record. The student questionnaire is based on an evaluation form from an American Educational Research Association workshop, Scriven's checklist and EO-CRDG experiences. The one page form includes Likert-type items on course (or class) organization, pace, difficulty, and opportunities to interact or ask questions. Three open-ended questions cover strengths, weaknesses, and other comments. Students assign a letter grade (A-F) to the course. The observation form used is a modified version of the Far West Laboratory for Educational Research and Development. It includes engagement time, active teaching behaviors, student and teacher field notes, and teacher time allocation. Using the State's performance expectations for major subject matter areas, cognitive tests were constructed. For greater efficiency, final reports would include writings that had proven to be successful in communicating in the past. The three generic instruments developed in this study are appended. (PN)

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Generic Evaluation--An Approach to Surviving Multi-Project Evaluations

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Paper presented at the annual meeting of the American Evaluation Association, Toronto, October 1985.

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Generic Evaluation -- An Approach to Surviving Multi-Project Evaluations

#### INTRODUCTION:

At last count our evaluation office was responsible for 13 separately furded evaluation projects. Granted the range of funding was modest: \$4,000 to \$31,000; however, as most evaluators know, all evaluations require substantial amounts of effort (often more than criginally expected) regardless of funding level. As the senior staff of the evaluation section of our curriculum research and development organization for the past 10 years, we have learned to adjust to the practicalities of conducting evaluations of several projects at the same time. Only recently have we had the time to analytically study our efforts in this area.

In this paper we describe several areas where adjustments were critical. The situation is akin to a meta-evaluation of an evaluation organization's procedures. Because of the relative newness of the topic, we will focus on what would logically be called formative meta-evaluation of organizational procedures.

Although many evaluators spend substantial amounts of time developing data collection instruments "from scratch," others have argued that as much as possible, evaluators and researchers should try to use existing instruments. It is entirely reasonable to consider the possibility that a newly developed instrument may not have as much quality as an older one.

At a somewhat grose level, there is generalized use of developed methodologies; for example, the use of Likert-type scales in which degrees of agreement are assigned numerical values. Likewise the use of a standard set of adjectives has been used with the semantic differential approach. As a final example we cite the plethora of evaluation models which can be used to evaluate disparate programs or products.

When Scriven first presented his checklist approach (subsequently modified to the "key evaluation checklist"), he asserted that the method could be applied to any of the existing evaluation models or approaches. He argued, for example, that all evaluations should be concerned about the need for the program or product. Likewise all evaluations should look at critical competitors even if such competitors have to be invented. We took Scriven's (generic) checklist approach one (critical) step for their by developing generic data collection instruments that could be used with any evaluation method, including of course the checklist approach itself.



#### DATA-COLLECTION INSTRUMENTS

Questionnaires: Much must precede the administration of questionnaires: design of questionnaire, typing of draft, pilot testing, item analyses, solicitation of feedback, revision, retyping, and reproduction. Although word processors have made it possible to make revisions much more quickly, the creation of unique questionnaires is still a time-consuming task. Several years ago we came across a generic evaluation form that was used to obtain feedback on American Educational Remearch Association workshops. The form had undergone several evolutions and was used for somewhat disparate workshops.

Because the great majority of our projects were delivered through classrooms, there were generic terms such as "course" or "class" which would apply to virtually all of our projects. The field of evaluation has an example of a generic approach in the Key Evaluation Checklist, which according to Scriven will work with any product or project as well as any evaluation approach or model. He saw the checklist as being useful in ensuring that evaluations include or at least consider the major important espects characteristic of good evaluations. In the midst of possible impending chaos in our shop, we saw he generic approach as also providing a means of eliminating substantial efforts in designing and producing questionnaires.

We then combined the AERA workshop evaluation form, Scriven's checklist, and our vast experience in conducting evaluations and came up with a student questionnaire that we have been able to use with projects involving such disparate topics as bilingual education, computer education, special education, and nutrition education. The form is one page and includes Likert-type items on course (or class) organization, pace, difficulty, opportunities to interact or ask questions. There are three open-ended questions covering strengths, weaknesses, and other comments. Finally the student is asked to assign a letter grade (A-F) to the course. A copy of the instrument is in the appendix.

Observations: Recently observation techniques have been developed that enable the collection of systematic, reliable data from the classroom. During the early part of this decade, the US Office of Education awarded a multi-million dollar contract to the Far West Laboratory for Educational Research and Development to conduct a descriptive study of bilingual education. The naturalistic approach used by the Far West Lab included an extensive battery of observational instruments based on the existing literature. Although the training of the data collectors for that study was extensive and expensive (80 hours each for six data collectors), it became clear that a much more modest level of training still could yield valid, reliable data.

The following (modified) subset of the observational forms used in the Far West Lab study was selected: a) engagement time (cf. time on task or academic learning time), b) active teaching behaviors, c) student field notes, d) teacher field notes, and sometimes e) teacher time allocation. All forms were found to be workable as well as



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relevant to evaluations of projects in differing areas. Instruments covering engagement time and active teaching behaviors are presented in the appendix.

Cognitive Testing: It is much more difficult to escape having to customize cognitive test development; however, even here there are some afficiency promoting methods. We have developed, for example, a computer literacy test that has been used in computer-assisted education projects as well as computer literacy projects.

By using the State's performance expectations for the major subject matter areas, we were able to construct cognitive tests that attempted to measure what were the "official" objectives of the Department of Education. No matter what a given project professed as objectives, valuable evaluation information could be obtained by investigating the project's effect on the Department's professed objectives.

Report Writing: No matter how carefully we planned, it almost always seemed that our final reports were late. Then we realized that a generic approach to report writing would also make sense. For one thing there would be less energy spent on rewriting boilerplate sections such as strengths and weaknesses of the evaluation staff or on observation methodology. By the evolutionary process, writings that had proven to be successful in communicating in the past would be included. Finally typographical errors would be greatly reduced inasmuch much of the report will have gone through previous proofreading.

#### SUMMARY/CONCLUSION:

When an evaluation organization is responsible for several projects, it may be desirable to use generic evaluation methods that can cross over disparate content areas. Which generic methods are effective can best be ascertained by formative and summative evaluation procedures. In this paper we report on several generic evaluation methods that have proven effective (or at least have enabled us to survive) and suggest that the field ought to seriously consider the development and dissemination of others that would assist those evaluation organizations that have to conduct several evaluations at the same time.

We see an additional benefit to using generic evaluation forms. It may be possible to conduct genuine national studies, where sites use comparable forms. Furthermore, the use of generic forms even for organizations concerned with only one evaluation project will minimize the occurrence of flaws in the wording of the items.

The attached generic forms have proved to be useful for our situation. Perhaps in order to be effectively used by others they would have to be customized to better fit the situation as well as the philosophy of the (other) evaluation staff. On the other hand generic evaluation methods may be the key to promoting efficiency and quality in evaluation. How will we know what the true situation is? By evaluating, perhaps even generically, the use of generic evaluation methods.



### Formative evaluation feedback from students

SEX	Male	Female				AGE	
Dire	ections: Please an	awer the	following	a quest:	ions in	relation to	Your
	ent experiences in			, ,,,,,,,,			,
1.	The organization	of the co	urse has	been:			
	excellent	1	2 3	4	5	poor	
2.	Overall the pace	of the co	urse has	been:			
	too slow	1	2 3	4	5	too fast	
з.	Opportunities for	asking q	uestions	have be	en:		
	insufficient	1	2 3	4	5	sufficient	
4.	The amount of wor	k require	d of you	has bee	en:		
	far too much	1	2 3	4	5	far too lit	tle
5.	Did you understan	d what wa	s going o	on in c	lass?		
	almost never	1	2 3	4	5	almost alwa	ys
6.	Considering what time spent was:	you have	gotten fi	rom taki	ing thi	s course, the	ł
	well worth it	1	2 3	4	5	not worth i	t
7.	What were the str	engths of	the cour	rse?		•	
8.	What were the wea	knesses o	f the cou	ırse?			
9.	Give the course an	overall	grade (A-	-F).			



# ET OBSERVATION CODING SHEET

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### TEACHER INSTRUCTIONAL BEHAVIOR RECORD

SITE: 1 2 3 4 5 6 7 8 9 CLASS NUMBER:
TODAY'S DATE: OBSERVER NUMBER:
LESSON TYPE: 1 2 3 4 5 APPROXIMATE LESSON DURATION:
Below are listed those teacher behaviors which may have occurred during the time you observed instruction for this lesson. For each, place a check mark in the appropriate box if it occurred (even if it occurred only once, you should check the box).
1. The teacher actively presented instruction/information
Stated what students were to learn in lesson (goals, objectives)
Outlined the lesson before proceeding
Explained: concepts, definitions, relationship of tasks to goals, etc.
Reviewed: goals, previous related instruction, etc.
Illustrated: how to do the work, how to do a problem, etc.
Questioned students to see if they understood
Answered student's questions about what they were to do
Summarized: what was presented, what class had done or learned, etc.
Moved the class quickly from one activity or lesson to another
<ol> <li>The teacher established and maintained engagement of students in instruction, tasks, activities</li> </ol>
Told students to attend to tasks (whole class or individually)
Explained the rules of behavior
Signalled students to get to work (turned off lights, eye contact, etc.)
Resolved potential disruptions
Resolved student misbehavior
Encouraged students to keep up (maintain pace)
Sustained momentum in the lesson, not letting it slow down
Adjusted instruction (faster/slower) according to students' speed



## TEACHER INSTRUCTIONAL BEHAVIOR RECORD, p. 2

	3. The teacher monitored students' progress in learning, completing tasks										
	Scanned the room to see if everyone was working										
Ш	Reviewed students' work when it was completed										
$\Box$	Recorded students' work when it was completed										
$\Box$	Monitored students' responses										
ΠI	Roamed the room, checking students' work										
II	Questioned students: learned a concept, learned a fact, completed work										
	Collected students' work										
	4. The teacher provided instructional feedback to students										
	Told student answer (work) was correct or incorrect										
口	Provided "key" so students could check answers										
	Modeled appropriate responses for students										
	Demonstrated how to complete work correctly										
	5. The teacher focused on developing students' language (L1 or L2)										
	Insisted on whole sentence utterances										
$\square$	Asked comprehension questions both in L1 and L2 if necessary										
口	Rejected students' response in one language when focus was other language										
	<u>Demonstrated</u> differences of concepts between L1 and L2										
$\square$	Corrected students' use of either L1 or L2										
	6. The teacher used two languages for instruction										
$\square$	The teacher used formal translation										
	The teacher used informal translation										
	The teacher used language alternation										
	7. The teacher responsed to cultural cues and used these to further instruction										

